

**HW 3** Due on February 28th at 10:30 am.

Name: \_\_\_\_\_

Note - you only need MATLAB to answer the first question.

## 1 Accessing MATLAB

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To answer these questions, you will need access to MATLAB using any one of the four options given at Introduction\_To\_MATLAB. You don't need to know what the commands mean - this is only a check that you are able to get MATLAB to work.

Hint: To prevent transcription errors, copy and paste these commands on to the MATLAB command line. If you are using MATLAB through the VCL and you are using a Mac, you will need to use `Command C` to copy from your browser and `Control V` to paste onto the MATLAB command line.

- Start MATLAB and enter `rand(1)` on the command line. Write down what you see after you press enter.
- Enter `sprintf('%d ', 'LoL')` on the command line. Write down what you see after you press enter.
- Enter `sprintf('%d ', 'weigel')` on the command line except replace `weigel` with your last name. Write down what you see after you press enter. Extra credit: What do the numbers mean?
- Enter `version` on the command line. Write down what you see after you press enter.

## 2 Valid Names

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Which of the following are valid names for a variable? State the reason for your answer. (See the module on Assignment for syntax rules.)

- `_twelve`
- `seven`
- `My Variable`
- `MyVariable`
- `A1^3`
- `A/B*C`

### 3 Array Syntax I

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See the module on Arrays and Arrays#Questions for help with answering this question. You should be able to answer this question without using MATLAB (on the Mid-term there will be similar questions and you will not have access to MATLAB).

Describe what would happen if you entered the following on the command line:

```
clear;  
A(1) = 1;  
A = [3,4,5,6];  
A(1)
```

Describe what would happen if you entered the following on the command line:

```
clear;  
Q = [100.0, 100.1, 100.2];  
Q(2)+Q(3)
```

### 4 Array Syntax II

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See the module on Arrays and Arrays#Questions for help with answering this question. You should be able to answer this question without using MATLAB (on the Mid-term there will be similar questions and you will not have access to MATLAB).

Describe the problem with the following sets of commands

```
clear;  
z = 10;  
A(0) = z;
```

### 5 Array Syntax III

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See the module on Arrays for help with answering this question. You should be able to answer this question without using MATLAB (on the Mid-term there will be similar questions and you will not have access to MATLAB).

Which of the following (circle each one that applies)

- A = [1:7];
- A = [1:2:7];
- A = [1:7:2];
- A = [1,2,3,4,5,6,7];
- A = [1,3,5,7];
- A = [1,3,[5:2:7]];

is the same as entering

```
A(1) = 1;  
A(2) = 3;  
A(3) = 5;  
A(4) = 7;
```